

WAR DEPARTMENT  
ALASKA ROAD COMMISSION  
JUNEAU, ALASKA

Fairbanks Alaska  
March 16 1930

Mr. Frank Nash,  
Sup't. A.R.C.,  
Fairbanks, Alaska.

Dear Sir;

In compliance with an order contained in a letter from you dated January 2nd, 1930, Charles Mayben and myself left Fairbanks on January 4th, by dog team and traveled over the routes described in the following report;

Route 23A Snowshoe--Beaver.

All cabins on this route are in a good state of repair, but there should be a new stove installed in the old Snowshoe roadhouse and the stove pipe should be replaced as the present stove and pipe are burned out and are not safe. Three lengths of stove pipe will soon be required in the Fossil Creek cabin and five lengths in the Bull Creek cabin.

The last ten miles of this route should be re-staked, as at least one party lost the trail here this past winter and came near to having to spend the night in the open.

Route 23B Beaver--Caro.

This trail is nearly level to the 5 mile culvert, and seems to be over good ground. This culvert was damaged during the breakup last spring but was repaired last summer by Mr. O. J. Nickolson.

From the 5 mile the trail raises a little faster with long stretches of 2 and 3% grades, with corresponding drops into creeks and draws.

From the 5 mile to the 15 mile the trail seems to describe a long curve. A dry ridge is supposed to run nearly straight between these two points, so if a trail were cut over this ridge it should shorten the trail about two miles. This would cost about \$1,500.00 but is not justifiable at the present time, as the majority of the present trail is on good ground.

The 14 mile cabin was repaired during the past summer and is in good condition, also the stove and pipe are in good condition.

At the 16 mile there was 300 feet of a side hill glacier, but as the ground here is soft, this is hard to get away from, for no matter where the road should be built the water would break out.

At the 18 mile there is a 30 foot bridge, 20 mile a 12 foot bridge, 20 $\frac{1}{2}$  mile a 16 foot bridge and at 24 mile a 42 foot bridge. All of the above bridges are in good condition.

The 24 mile cabin is in good condition as are the stove and pipes.

In mile 24 Carlson had cleared a strip 6 feet wide and 800 feet long, alongside of the old road. This work was absolutely unnecessary, as the trail was plenty wide in this place.

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The grades from Beaver to the 24 mile do not in any place exceed 5% except for about 300 feet down towards 24 mile creek where a 7% grade is encountered.

At mile 32 there is a bridge 18 feet long, this bridge is in good condition and will be good for another three or four years.

There is a small trappers cabin at mile 32 which has a good A.R.C. stove in it.

In mile 35 there is a bridge 22 feet long this bridge was repaired during the past summer by Mr. Nicholson and is in good condition.

The A.R.C. cabin at mile 36 was repaired during the past summer and is now in good condition.

The bridge at mile 40 was also repaired during the past summer and will be good for the next four or five years.

At mile 40½ there is a bridge 24 feet long and at mile 42 there is one that is 32 feet long these bridges were also repaired and are now in good condition.

The 46 mile cabin, stove and pipes are all in good condition.

Just beyond the 46 mile cabin the trail crosses the Orenzie River, the banks of which are graded down on both sides. The distance from top of bank to top of bank across this stream is about 180 feet. During the past winter Carlson and others built a temporary bridge across the open channel of this stream. They laid a log on the gravel bars on each side of the water and laid three stringers across and put on a pole deck 14 feet wide. This bridge is convenient but not necessary as there was only 8 inches of water in the deepest place when we crossed it. In the spring this bridge will wash out as there is from 8 to 10 feet of water in this stream. The average depth of water during the summer is about three feet. Even if anchored with a cable this bridge will go out with the spring breakup as its construction is not strong enough to withstand any drift wood that may come down with the water.

The cabin at 56 mile is in good condition as are the stove and pipe in this cabin.

The bridge across 56 mile creek is 18 feet long and is in good condition.

The 61 mile cabin, stove, pipe and barn are all in good condition.

In mile 65 Carlson cut a shoefly about 800 feet long around a washout in the trail. Mayben already had a shorter one cut around this same washout. Carlson only starts farther up the hill and then connects with the one cut by Mayben a couple of years ago. This work was also absolutely unnecessary.

The bridge across Schilling creek is about 36 feet long and is in good condition.

At mile 70 there is a 70 foot bridge, at mile 70½ a 30 foot bridge and at mile 73 there is a 20 foot bridge.

"3"

These bridges are apparently all in good condition but could not make a good inspection of the one at mile  $70\frac{1}{2}$  as it was completely covered by a glacier.

Some of the miles in this route are undoubtedly short, as the trail has been changed in several places without a change in the mileposts. So I do not believe the distance from Caro to Beaver is over 72 miles, but the old mileposts are used for all distances given.

The tram across the Chandalar river is located about  $\frac{1}{2}$  mile above where the trail strikes the river. This tram is 542 feet long from tower to tower, with a 1" cable trolley and a pulling cable of  $\frac{3}{16}$ " diameter. The pulling cable is worn and will have to be replaced very soon. The trolley cable leads thru the towers and is looped around an iron pin at the back of the tower. The anchor cable that leads from the deadmen thru the turnbuckles to the towers is looped around another pin on the opposite side of the tower leaving a space between the pins of about two feet. When the turnbuckles are tightened, this arrangement of the cables will twist the towers instead of tightening the trolley cable. The cage is a very heavy affair, that could be lightened with safety, and a lighter and smaller trolley could be used.

Carlson and others claim that they filled numerous chuck holes on this route with snow, brush and short poles. This will undoubtedly have to be removed next summer, otherwise these poles after the freeze up next fall maybe sticking out of the ground and become dangerous to dogs and horses. This work as far as could be seen will be of no permanent value and was unnecessary.

In the first few miles out of Beaver some brush should be cleared out of the road and other maintenance work performed, for which the following sums should be sufficient.

Maintenance Beaver to Caro	\$500.00
Pulling cable for Tram	200.00
Alteration of Tram	80.00
Total	\$780.00

If a bridge is to be built across the Orenzi River stringers long enough for a 68 foot A frame span could be found within one mile of the bridge site and a log crib pier filled with rock and dug below the scour line of the creek probably will stand as there is no ice run in this river. A bridge of this type would cost probably \$1,000.00. But would not recommend that such a bridge be constructed for 68 feet is rather a long span for this type of bridge, and it is not necessary as a foot bridge is all that has been used here before.

The average amount of freight moved over this route is not over 6 tons a year. Under favorable weather conditions as much as one ton has been hauled on a wagon with two horses and  $2\frac{1}{2}$  tons on a sled with the same number of horses. A 30 Cat should in the winter after the trail is broken be able to safely haul a load of eight tons over this trail.

Route 23D Caro-- Little Squaw.

When we left Caro the ground was covered with about four feet of snow which was badly drifted. The trail is fairly level for about  $\frac{1}{2}$  mile when it climbs for about 700 feet on a 5% grade upon to a bench.

Carlson had cut a new road here that reaches the same point in about 800 feet. I cannot see the necessity for this work as the old road is the most direct, with practically no difference in grade. The trail continues for about a mile along close to the edge of this bench. Carlson had here in mile 2 cut another turnout about 600 feet long below the old road. This was also unnecessary as this piece of new trail was used once by him and then abandoned in favor of the old road.

The 17 mile cabin, stove, stove pipe and barn are in good condition.

The 27 mile cabin is a new one having been built last summer it is 12'x14' with a 7 foot wall it has a good stove and stove pipes in it. And should be good for some time to come.

In mile 27 Carlson cut a new road that drops off at grades ranging from 5 to 12% average 7%, for 1050 feet down onto a lake, then crosses this lake for 1000 feet, then cut 500 feet of trail across a ridge to another lake. The first 300 feet of this is on a 7% grade as this second lake lays at a higher elevation than the first one. From the second lake he cut 1000 feet of trail back up to the old trail, which he strikes in front of the new cabin. The entire distance of this last 1000 feet is on a 5% grade. The summer road which this cuts out is from 300 to 500 feet shorter and has much less ups and downs than this cutoff, in no place as the grade more than 5% and that for only 400 feet. The balance is level or on a slight down grade to the cabin.

In mile 28, in crossing a high narrow ridge, the steepest grade on this route is encountered. In climbing up on this ridge the road has been graded, but there is about 300 feet of 8% grade and in dropping off of it about 500 of 15%.

Mr. Carlson cuts away from the old road on top of this ridge by swinging to the right along the top of the ridge for about 200 feet where he swings back and cut a sidling trail for about 1000 feet on an average grade of about 8% to a junction with the old road at the foot of the hill. This work was not necessary as the old road despite the steeper grades was by far the best. These steep grades could be avoided by a line change which would necessitate 1000 feet of grading and 1500 feet of clearing at an approximate cost of \$400.00.

At mile 30 Carlson built a bridge 16 feet long across a small creek. Mayben states that he did not build a bridge here because the creek bed was so shallow that he had no trouble in crossing it with a wagon in the summer time. In the winter there is always a glacier at this place a bridge here will have to tendency to help the glacier build up which will make the crossing harder instead of easier.

In this same mile Carlson also built a 12 $\frac{1}{2}$  foot bridge across a small mud hole, this bridge is not necessary as this hole does not give any trouble except when the waters of The Middle Fork of The Chandalar are extremley high.

At Graves Creek Mile 32 there is a good A.R.C. Cabin which is equiped with a good stove and pipe.

When we arrived at Caro on January 29th, about 60% of Mr. Shulzers mill machinery had been moved from Caro to mile 10. Owing to adverse snow conditions it was almost impossible to keep the road open, it being necessary to break it out practically every trip so for this reason the work of moving the mill was abandoned on January 30th, and on February 1st, the teams left Caro to return to Beaver.

If the work of moving this mill had been started on the first snow last fall the work should have been completed before the snow got too deep, and the road such as previously constructed would have been good enough without any additional work being done.

On February 4th, I met Carlson at Little Squaw and I asked him to give me a report of all the work performed by him and others on routes 23B and 23D. He showed me of his own accord a telegram which he received from Mr. Sulzer, the following is a true copy of this telegram.

New York N.Y.  
Oct. 3 $\frac{1}{4}$  1929

Commissioner C.L. Carlson  
Chandalar, Alaska  
Via Fort Yukon Alaska

Have succeeded in getting A.R.C. to authorize you and Shultz to make necessary repairs Chandalar road not exceeding five thousand dollars stop arrange work with Shultz to get road in good shape soon as possible so that mill machinery can be hauled in this winter stop mailing particulars

Wm. Sulzer

The following is a statement from Carlson of the work performed by him and others.

I left Beaver October 17 1929 to do the work on the road from Caro to Little Squaw. At mile 24 from Beaver I found that the old trail had been washed out so I widened the road at this point for about  $\frac{1}{4}$  mile, I then built a three sgringer bridge 36 feet lang and 16 feet wide across the Orenzie River, at mble 65 I cut a turnout of about  $\frac{1}{4}$  mile, at miles 72, 73 and 74 I cut short turnouts or sheeflys. On the road to here I filled several chuckholes with brush and snow.

At mile 1 on route 23D I cut  $\frac{1}{2}$  mile of new road, I then used wood fires to assist in cutting down several humps in the road for the first 6 miles out of Caro. I filled several chuckholes with brush and snow between miles 9 and 17. Cut  $\frac{1}{2}$  mile of new road in mile 27, cut around a steep hill in mile 28 then

filled several holes in mile 29 with brush and snow. In mile 30 I built a three stringer bridge 16 feet long and 12 feet wide and in mile 31 I built a three stringer bridge 12 feet long and 12 feet wide. Then I filled some holes between miles 31 and 33.

According to conversations with Carlson and Buckley there was from 5 to 6 inches of snow on the ground when they performed the above work. It took four men and two teams 40 days to do the above work.

#### Route 23F Chandalar Aviation Field.

On this aviation field there are supposed to be one large and several small humps which have been caused by the freezing of the ground that need levelling. The sum of \$400.00 should be sufficient to take care of this.

#### Route 23C Big Creek Trail.

This trail is in good condition. It is well staked and is well supplied with shelter cabins all of which are in good condition and equipped with good stoves and pipe.

#### Route 23E Caro--Coldfoot.

About  $2\frac{1}{2}$  miles from Caro there is a bridge 20 feet long, across a creek and at mile 20 there is another one about 20 feet long, both of these bridges are in good condition.

At Mile  $13\frac{1}{2}$  the trail crosses the Middle Fork of the Chandalar River. About  $\frac{1}{2}$  mile down stream from the crossing on the left limit, there is a private cabin with a good A.R.C stove in it.

About  $2\frac{1}{2}$  miles upstream from the trail crossing there is a tram across the middle fork. This tram is 350 feet from tower to tower. It was repaired by the A.R.C. a couple of years ago and is said to be in good working order.

At mile 20 on this trail there is a private cabin, there is also a private cabin at Mile 24 the junction of the big creek trail. These two cabins are in good condition and are always open to the traveling public.

From mile 24 the trail continues for about 9 miles to the tram across the North fork of the Chandalar river. This piece is mostly over open country, is poorly staked and is very hard to follow.

The tram across the North Fork is 240 feet long and is in fair condition.

At Horse creek about  $\frac{1}{4}$  mile from this tram there is an A.R.C. cabin which is in poor condition. It is equipped with a good stove and pipe.

From here to Crooked creek the trail is over open

country and needs restaking. The cabin at Crooked creek burned down a year ago, a new one should be built in the last timber before the trail starts climbing up over the pass into the Koyukuk watershed. This should be about ten miles from the Horse creek cabin and about 17 miles from the cabin on the South Fork of the Koyukuk River.

From the Crooked creek valley the trail climbs for about  $1\frac{1}{2}$  miles to the top of a divide, then it runs thru a thickly timbered country for about ten miles. No trail seems to have been cut thru here, only an occasional blaze 1000 to 1500 feet apart show where the trail was intended to go. Only the last  $\frac{1}{2}$  mile towards the tram across the South Fork of the Koyukuk is fairly well cut out.

This tram is about 180 feet long and is built on shear-legs instead of towers. This is a better arrangement than towers as the anchor cable is wrapped around the top of the shearleg and the turnbuckle will tighten the trolley cable instead of twisting the shearlegs. The trolley is in need of greasing, otherwise it is in good condition.

About 1000 feet from the tram there is a flat roof cabin. This cabin is in very poor condition and will probably not last another year, there is a good A.R.C. stove in it.

The next five miles to the Boulder creek cabin are in open country and is not staked so it is hard to tell just where the trail is supposed to be.

The Boulder creek Cabin is a 12x12 cabin with a fair stove and pipe in it.

From this cabin it is about 9 miles to the first cabin on Slate creek and about 14 more miles to Coldfoot. In this last 23 miles we only saw three tripods so cannot say whether we followed the trail or not.

The entire length of this trail from Caro to Coldfoot is about 88 miles, the last 64 of which should be restaked and in places (Mile 47 to 60) should be recut. It is a good winter trail only.

New cabins should be built at Mile 43, Crooked creek and mile 60.

#### Route 47 Coldfoot--Wiseman.

At Coldfoot there is no A.R.C. shelter cabin but the Pioneers of Alaska Igloo No. 8 have fixed up a cabin with a Yukon stove in it.

All creeks between the two places were either bridged last summer or the existing bridges repaired and placed in good condition. Both Marion and Slate creeks are crossed by trams? Each of these trams are 180 feet long, they are in good condition except the pulling cables.

About 2 miles below Wiseman there is a tram across the Middle Fork of the Koyukuk River. This tram is 352 feet long and built on shearlegs instead of towers. A rope  $\frac{1}{2}$ " in diameter is used instead of cable to pull the cage back and forth with. This rope is in poor shape and will have to be replaced during the coming summer.

#### Route 47A Wiseman Aviation Field

This field is located about 700 feet from the wireless station and is cleared 1300x300 feet. A strip thru the center 150 feet wide is graded but is full of frost humps and in need of regrading.

The road from the field to town is crossed by two soft sloughs which when wet cannot be crossed in anything but hip boots these sloughs are each about 50 feet wide and on both sides is gravel these sloughs should be filled.

A strip of land between the North end of the field and Wiseman creek about 150x300 feet is thickly covered with young Spruce and willows. These should be cleared out as they act as a fence which cause heavy snow drifts to form on the field.

Cost of grading field	\$500.00
" " filling sloughs	100.00
" " clearing	100.00
Total	<u>700.00</u>

#### Route 29A Coldfoot Bettles.

This route is about 50 miles long, the miles being numbered from the Bettles end. From Coldfoot the trail runs down the left bank of the river to mile 47 where it crosses to the right side. After crossing the Middle Fork the road winds around some lakes and sloughs. At mile 43 there is a private barn and at mile 40 a cabin was built last summer and a new A.R.C. stove installed. In this section there are several sharp turns and steep pitches that should be cut out.

Between mile 40 and 37 the road climbs up on the ridge between the Middle Fork and the North Fork. On this section grades as high as 15% are encountered, this section of road should be changed.

At mile 35 $\frac{1}{2}$  the road crosses a small lake, this should be eliminated and to do so some grading may be required.

At mile 34 there is a good A.R.C. cabin which is equipped with a good stove and stovepipe. There is also a good barn at this place.

From mile 25 to the North Fork a new road was cut last summer, that runs mostly down hill on grades that do not exceed 6%. On both sides of the North Fork the banks are very steep and should be graded down. On the Right bank of the North Fork a new cabin was built last summer, this cabin is in good condition. 77



This cabin was built about 250 feet off of the trail in thick timber which will make it hard to see after dark for a traveller not acquainted with this new road.

At mile 19 turns toward the Middle Fork, at mile 18 $\frac{1}{2}$  it crosses a warm slough about 60 feet wide, with very steep banks, it then joins the old road at mile 17 $\frac{1}{2}$ , where there is an A.R.C. cabin. This cabin is not in very good condition, the stove and pipe are good.

From here follows down the right bank of the Middle Fork to the 14 milepost. In this stretch at about miles 16 and 15  $\frac{3}{4}$  there is two deep narrow sloughs the banks of which should be graded.

Last fall Mr. Dubin a trader of Wiseman, who is freighting over this route with a 30 Best Tractor, to avoid the above mentioned three sloughs, at his own expense said to have been \$2,500.00, cut a trail that leaves the road at the 14 mile post and joins it again at the 19 milepost, and is this winter using it in preference to the A.R.C. trail.

At about the 14 milepost the road crosses the Middle Fork and continues down the left limit in long tangents and again strikes the river about  $\frac{1}{4}$  mile above Bettles. The balance in to Bettles is on the river ice.

Over this and the adjoining route, route 47 two horses with sleds have hauled as much as two ton loads, and Mr. Dubins tractor made one trip to Wiseman last fall with a 7 ton load.

If the road is improved between miles 14 and 19 and also 37 and 47 a thirty tractor should be able to haul 12 ton loads over these two routes.

Straightening road between miles 47 and 40	
and grading steep pitches	\$600.00
Changing road between miles 40 and 37	3000.00
Other grading and Maintenance	1100.00
Total	<u>\$4600.00</u>

#### Route 29D Wild River Trail.

This trail was not covered on this trip, but from information gathered it appears that there is need of two more cabins on this route. One at mile 8 and one to replace the one formerly at mile 45 which burned down.

Estimated cost \$800.00

#### Route 29 Bettles--Fort Gibbon.

The trail runs down the Koyukuk River for about a mile, thence up on the right limit of the river across a small creek valley and a low wide ridge to the Chinmoke cabin, which is about 9 miles from Bettles.

This is a 10x10 flat roof cabin and is in fair

condition, the stove and pipe in this cabin are good.

From here the trail climbs across a low ridge, crosses a wide shallow creek valley and follows along a bald hillside for about 4 miles, to where it enters some heavy green timber, to the Murphy cabin, which is about 6 miles from the Chinmoke cabin.

The Murphy cabin is a 12x12 gabled roof cabin with 5 foot walls. This cabin has slipped down hill ~~away~~ and the walls are about one foot out of plumb. This cabin will probably fall down next summer.

The trail then follows the top of a ridge around the head of a small creek, over a raise and down a long incline into the valley of the East Fork of Henshaw creek, across this and over some swampy ground, to the Henshaw cabin, which is about 7 miles from the Murphy cabin.

The Henshaw cabin is 10x12, with a flat roof, and 5 foot walls, it is equipped with a good stove and pipe.

After leaving the Henshaw cabin, the trail crosses the Henshaw River, then follows up a small creek to a low divide, then down another small creek into the flats of the Alatana and Koyukuk rivers. The trail strikes the river about one mile above the village of Alatana, which is 14 miles from the Henshaw cabin.

A shelter cabin should be erected at Alatana, as there is no place to stop here, except thru the kindness of Mr. Dubin who operates a trading post at this place.

From here the trail runs down the right limit of the Koyukuk river for about three miles, then for one mile on the river, thence across a point of land on the right limit to where it again strikes the river about 7 miles below Alatana. Here it crosses the river and runs over some niggerhead flats to a cabin about 14 miles from Alatana.

This is a 10x10 flat roof cabin, with a small but good Yukon stove in it. The roof poles in this cabin are rotten and are beginning to cave in. They will have to be replaced very soon.

From here the trail is for 8 miles over a gently rolling country which is well supplied with lakes and niggerheads. The Kanuti or Oldman river is crossed and two miles beyond this river there is a cabin commonly called the 96 mile (From Tanana) cabin.

This is a 12x12 flat roof cabin with a 2x3 door hole but no door. It is equipped with a new stove and pipe. This cabin is in fair condition.

The trail then continues over similar ground for 6 miles to the 90 mile cabin. This cabin is in good condition it is about 10x12, gabled roof with four foot walls and is equipped with a good stove and pipe.

About two miles from this cabin the trail drops down onto Steese Lake, which it follows for about three miles, then enters a deep narrow winding creek which it follows for about  $\frac{1}{2}$  mile.

This creek is not marked and is hard to find. A tripod should be put up at the mouth of this creek. The trail then follows up the right limit of this creek to where it forks, thence up the ridge between the two forks to the top of a divide. Just over the top of the divide about 11 miles from the 90 mile cabin there is another cabin, which is a 12x12 flat roof cabin, with a 2x2 foot door hole. This cabin is in poor condition. The stove and stovepipe are good.

From this cabin to the 70 mile (Hughes) cabin it is about 9 miles and mostly down hill.

The 70 mile cabin is 12x12 with 5 foot walls, it has a two by two door hole but no door. It is in fair condition, the stove and pipe are in good condition.

From here the trail drops down into the valley of a Fork of the Melozitna River, crosses this and climbs on grades of from 5 to 10%, up on a high ridge, thence down a long gentle incline to the Melozitna River, which it crosses, to a cabin located about 10 miles from the Hughes cabin. This cabin is commonly called the 60 mile cabin. This last stretch of trail traverses a barren windswept country, but the trail is well staked and easy to follow.

The 60 mile cabin is 12x12 with a flat roof, a 2x2 door hole but no door, and is in fair condition. The stove and stove pipe are rotten and will have to be replaced very soon.

The trail then climbs over a ridge into the valley of the Tozitna River, then down the left limit of this river to the North Fork, where is located a shelter cabin, known as the 45 mile cabin.

This is a 12x12 flat roof cabin with a 2x2 door hole but has no door, it is in fair condition. The stove and pipe are in good condition.

After leaving the 45 mile cabin the trail crosses the North Fork and continues down the Melozitna valley for 9 miles to and across the Middle Fork. Here there is a cabin known as the 36 mile cabin. This is a 12x12 flat roof cabin and is in fair condition, the stove and stove pipe are also in good condition.

The trail then crosses a low ridge into the South Fork valley. Three miles from the Middle Fork there was a cabin but it was undermined and washed away. The stove that was in this cabin was removed and placed in the 45 mile cabin.

From the 36 mile cabin to the 22 mile cabin the trail traverses a country that is covered with small scattered spruce.

The 22 mile cabin is a 12x12 flat roof cabin and is in good condition, the stove and stovepipe in this cabin are poor. There is also a private cabin of the same size at this place.

After leaving the 22 mile cabin the trail climbs across and over a high bald ridge and 9 miles from the 22 mile cabin strikes a cabin known as the 12 mile cabin. This is a new 12x14 gabled roof cabin and is in good condition. The stove and pipe in it are new?

From here the trail is down hill for the next ~~ten~~ miles then over a level swampy country into Tanana.

About  $1\frac{1}{2}$  miles out of Tanana there is two 26 foot bridges over dry ditch like cuts in the swamp. These bridges are caving in. One half mile of new trail can be cut around this place, avoiding these two bridges.

Summary; Replacing Stoves and Pipe	\$100.00
Cutting $\frac{1}{2}$ mile new trail	100.00
Total	<u>\$200.00</u>

#### Route 5E Tanana Aviation Field.

This was covered by a special report dated March 14 1930.

#### Route 5A Dunbar--Ft. Gibbon.

On this route near the town of Tanana, there are two culverts that need more dirt filled in on top of them, and the slip on the North bank of the Yukon River needs regrading.

At about mile 125 there are two bridges that have become undermined, timber is handy here, but a shoefly can be cut which will eliminate these two bridges.

The bridge at Boulder creek was repaired last summer but should have new stringers put in next fall.

At mile 102 American creek there is a new bridge? It is in good condition and should last for several years.

The bridge at mile 95 Woodchopper creek is rotten and should be replaced as soon as possible. Mr. Allan McLeod said he would land timbers here this winter and take chances that the Road Commission would use them. This timber has to be hauled about 7 miles.

At mile  $93\frac{1}{2}$  there is a 36 foot bridge which will last for another year or more as will the one at mile 89 Rock Creek.

Between miles 89 and 85 there should be a few more culverts put in. At about mile 85 there is a 60 foot three bent bridge which is in good condition. At mile 61 there is a 60 foot bridge across a slough, with cribbed ends and four framed bents. one post is missing in one of the center bents. At mile 57 there is a 22 foot bridge in fair condition.

Brush is overgrowing the trail in several places and will have to be cut during the coming year.

An allotment of \$1500.00 should be ~~necessary~~ sufficient to do the above work.

#### Route 5B Nenana--Campbells

The length of this route is about 30 miles.

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The banks of a couple of sloughs may need some grading before next fall.

Brush is crowding in towards the trail over most of this route, but does not as yet constitute a serious hinderance to the traffic over it.

Very truly yours

Iver Quenboe  
Instrumentman.